Application Serial Number: 09/885,408

In response to Office Action dated September 29, 2003

## IN THE SPECIFICATION

Please amend the Title on page 1 to read as follows:

## COMMUNICATION SYSTEM <u>AND METHOD</u> EMPLOYING AUTOMATIC , REPEAT REQUEST

Please replace the paragraph beginning at page 10, line 20 as follows:

The transmission end starts (in step S10) and transmits a new packet or a retransmission packet to the reception end (in a step S11). The reception end starts (in step S20) receives this packet (in a step S21), demodulates it, and, also, calculates reliability of the demodulated packet so as to obtain reliability information (in a step S22).

Please replace the paragraph beginning at page 11, line 11 as follows:

Then, it is determined in a step S23, by using error detection code, for example, whether or not the demodulated packet includes error. Then, by using a result of this error detection and the above-mentioned packet reliability, the ACK/NACK signal expressed by more than two levels is generated (in steps S24 and S25), and is sent to the transmission end as a feedback signal (in step S26). The process then returns to step S20 (in step S27).

Please replace the paragraph beginning at page 12, line 8 as follows:

Then, the transmission end receives the ACK/NACK signal, and determines whether the ACK/NACK signal expresses ACK or NACK (in step S12). When the ACK/NACK signal expresses ACK, the transmission end deletes the already transmitted packet from a

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returns to step S10 (in step S15).

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transmission buffer, and sets the transmission packet to be a new packet (in a step S13). Further, when the received ACK/NACK signal expresses NACK, the transmission end sets the transmission packet to be a re-transmission packet (in step S14). Accordingly, when receiving the ACK signal, the transmission end transmits a new packet. However, when receiving the NACK signal, the transmission end transmits the re-transmission packet (the packet same as or corresponding to that which was already transmitted). The method then

Please replace the paragraph beginning at page 14, line 2 as follows:

When error is detected, a NACK signal is generated (in a step S48), and, according to the reliability information of the received packet, it is determined whether or not the packet for which the error was detected is to be stored in the buffer of the reception end. When the reliability of the received packet is very low, merely a little effect is expected even if this packet is stored and is combined with a re-transmission packet, and, also there may be a case where a possibility that error occurs is rather increased by the combination. Accordingly, the received packet is stored only when the reliability thereof is high, but it is discarded when the reliability thereof is low (in a step S49). The other steps <u>S30, S40, S50-S50 and S32-S36</u> are the same as those the corresponding steps of FIG. 1, and description thereof is omitted.

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Please replace the paragraph beginning at page 15, line 4 as follows:

In the control flow shown in FIG. 3, a modulation parameter(s) (transmission parameter(s)) at the transmission end are changed based on the received ACK/NACK signal in a step S62. Steps S60, S70, S77 and S63-S66 are substantially the same as the corresponding steps of Fig. 1, and description thereof is omitted.

Please replace the paragraph beginning at page 20, line 11 as follows:

Then, the transmission end receives the ACK/NACK signal, and determines whether the ACK/NACK signal is the ACK signal or NACK signal (in a step S83). When receiving the ACK signal, the transmission end deletes the transmitted packet from the transmission buffer, and sets the transmission packet to be transmitted subsequently to be a new packet (in a step S84). However, when receiving the NACK signal, the transmission end sets the transmission packet to be a re-transmission packet (in a step S85). In Fig. 4, steps S80, S90, S86 and S98 are substantially the same as the corresponding steps in Fig. 1.

Please replace the paragraph-beginning at page 23, line-18 as follows:

In FIG. 9, the mobile station transmits a new packet or a re-transmission packet from a transmission buffer thereof (in a step S101). Each base station starts (in steps 110 and 120) and receives this packet (in a step S111 or S121), demodulates it (in a step S112 or S122), determines existence/absence of error (in a step S112 S113 or S123), generates the ACK signal (in a step S114 or S124) or the NACK signal (in a step S115 or S125), and transmits

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the ACK/NACK signal to the transmission end (mobile station) and a host station (in a step S116 or S126).

Please replace the paragraph beginning at page 24, line 20 as follows:

On the other hand, the mobile station uses only the ACK/NACK signals sent from the plurality of base stations (the number of base stations: M) as feedback signals, and performs re-transmission control by the determination same as that in the host station. That is, when not less than n ( $1 \le n \le M$ ) ACK signals are received, it is determined that the currently transmitted packet was properly demodulated at the reception end, and the transmission packet is set to be a new packet (in a step S104), but, when only less than n ACK signals are received, it is determined (in step S102) that the currently transmitted packet was not properly demodulated at the reception end, and the transmission packet is set to be a re-transmission packet (in a step S103) so that re-transmission will be performed to the reception end. Start steps S100, S110, S120 and S130, and return steps S105, S118, S128 and S135 are similar to those previously described, and are therefore not discussed in detail.

Please replace the paragraph beginning at page 26, line 7 as follows:

The mobile station receives the ACK/NACK signals from the plurality of base stations, combines them (S142) and determines ACK/NACK (S143). In Fig. 10 steps S140, S141, S150, S160, S144, S145, S146, S155, S165 and S178 are substantially the same as corresponding steps previously described, and therefore are not discussed in detail.

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Please replace the paragraph beginning at page 26, line 30 as follows:

When receiving the ACK/NACK signal from the mobile station, each base station transfers the ACK/NACK signal to the host station (S192 or S202). When receiving not less than n ACK signals ( $1 \le n \le M$ ), the host station determines that the currently transmitted packet was properly received at the mobile station, sets the ACK/NACK signal to be ACK (host) (S211 and S212), but, when receiving only less than n ACK signals, the host station determines that the currently transmitted packet was not properly received at the mobile station, sets the ACK/NACK signal to be NACK (host) (S211 and S213). The remaining steps in Fig. 11 are substantially the same as corresponding steps previously described, and are therefore not described in detail.

## IN THE ABSTRACT

Please delete the Abstract in its entirety and replace it as follows: